

ALANA WESTWOOD

Science and Policy Analyst,
Yellowstone to Yukon Conservation Initiative

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EDUCATION AND TRAINING

- 2018 **Mitacs Canadian Science Policy Postdoctoral Fellowship**, Department of Natural Resources, Government of Canada.
- 2016 **Dalhousie University**, Halifax, NS
PhD, Biology. Supervisor: Dr. Cindy Staicer
- 2011 **University of Winnipeg**, Winnipeg, MB
BSc. Hons, Applied Environmental & Forest Ethics. Supervisors: Dr. Jacques Tardif and Dr. Sandra Tomsons.

RESEARCH CONTRIBUTIONS

Citations: 102

h-index: 4

[Full profile on ResearchGate.](#)

Articles published in refereed journals

1. Cailleret, M., + 48 authors, including **Westwood, A.** (47th) 2019. Early-warning signals of individual tree mortality based on annual radial growth data. *Frontiers in Plant Science* 9: 1964.
2. Stralberg, D., Camfield, A., Carlson, M., Lauzon, C., Barker, N., **Westwood, A.**, Schmiegelow, F.K.A. 2018. Strategies for identifying priority areas for passerine conservation in Canada's boreal forest. *Avian Conservation and Ecology*, 13(2): 12.
3. Jacob, A.L., Moore, J.W., Fox, C.H., Sunter, E.J., Gauthier, D., **Westwood, A.R.**, Ford, A.T. 2018. Cross-sectoral input for the potential role of science in Canada's environmental assessment. *FACETS*, 3: 512-529.
4. Cailleret, M., + 66 authors, including **Westwood, A.** (62nd). 2016. A synthesis of radial growth patterns preceding tree mortality. *Global Change Biology*, 23(4): 1675-1690.
5. Barker, N., Fontaine, P., Cumming, S., Stralberg, D., **Westwood, A.**, Bayne, E., Sólymos, P., Schmiegelow, F., Song, S., and Rugg, D. 2015. Ecological monitoring through harmonizing existing data: lessons from the Boreal Avian Modelling Project. *Wildlife Society Bulletin*, 39(3): 1-8.
6. **Westwood, A.**, Reuchlin-Heugenholtz, E., Keith, D. 2014. Re-defining recovery: A generalized framework for assessing species recovery. *Biological Conservation* 172: 155-162.
7. **Westwood, A.**, Conciatori, F., Tardif, J., Knowles, K. 2012. Effects of *Armillaria* root rot disease on the growth of *Picea mariana* in the boreal plains of central Canada. *Forest Ecology and Management* 266: 1-10.

Articles in press

8. **Westwood, A.R.**, Olszynski, M., Fox, C.H., Ford, A., Jacob, A.L., Moore, J.W., Palen, W.J. The role of science in contemporary Canadian environmental decision-making: The example of environmental assessment. *UBC Law Review*, 52:1. Available on SSRN at

<http://ssrn.com/abstract=3309943>

Articles in revision

9. **Westwood, A.**, Staicer, C., Solymos, P., Haché, S., Fontaine, T., Bayne, E., Mazerolle, D. How many birds do national parks protect? Species distribution models for populations of two species at risk in the Canadian Maritimes. *Avian Conservation and Ecology*, ACE-ECO-2018-1189.
10. **Westwood, A.**, Lambert, D., Reitsma, L., Stralberg, D. Finding common ground: Regional spatial models to support both land conservation and forest management planning for the threatened Canada Warbler (*Cardellina canadensis*). *Avian Conservation and Ecology*, ACE-ECO-2018-1186.
11. **Westwood, A.**, Otto, S.P., Mooers, A., Darimont, C., Hodges, K.E., Johnson, C., Starzomski, B.M., Burton, C., Chan, K., Festa-Bianchet, M., Fluker, S., Gulati, S., Jacob, A.L., Kraus, D., Martin, T., Palen, W.J., Reynolds, J.D., Whitton, J. Protecting biodiversity in British Columbia: Recommendations for developing endangered species legislation. *FACETS*, facets-2018-0042.
12. Westwood, A.R., Saunders, D., **Westwood, A.**, Holliday, N. Efficacy of tebufenozide in an operational spruce budworm suppression program, and effects on the assemblage of non-target moths (Lepidoptera). *The Canadian Entomologist*, TCE-ART-2018-119.

Articles in review

13. **Westwood, A.**, Barker, N.K.S., Amos, A., Camfield, A., Cooper, K., Dénes, F.V., Grant, S., MacDonald, C., McBlane, L., Schmiegelow, F.K.A., Simpson, J.I., Slattery, S., Sleep, D., Wells, J., Whitaker, D. Coproduction of research for conserving Canada's boreal birds while considering Indigenous and community consent: An introductory guide. *Avian Conservation and Ecology*, ACE-ECO-2018-1188.

Non-refereed journal articles

Westwood, A., Walsh, K.A., Gibbs, K.E., 2017. United States: Learn from Canada's dark age of science. *Nature*, 542(7640): 165.

Technical reports and policy commentaries

1. **Westwood, A.**, Otto, S.P., Mooers, A., Darimont, C., Hodges, K.E., Johnson, C., Starzomski, B.M., Burton, C., Chan, K., Festa-Bianchet, M., Fluker, S., Gulati, S., Jacob, A.L., Kraus, D., Martin, T., Palen, W.J., Reynolds, J.D., Whitton, J. 2018. Protecting Biodiversity in British Columbia: Recommendations for an endangered species law in B.C. from a species at risk expert team. Available [here](#).
2. **Westwood, A.R.**, and Jacob, A.J. 2018. Evaluating the role of science in the proposed *Impact Assessment Act*. Available [here](#).
3. Jacob, A.J., and **Westwood, A.R.** 2018. Better rules need better science: Submission to the Standing Committee on Environment and Sustainable Development regarding the role of science in impact assessment. Available [here](#).
4. COSEWIC, 2018. COSEWIC assessment and status report on the Olive-sided Flycatcher *Contopus cooperi* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. To be released April 2018 (authored by **A. Westwood** and T. Stehelin).

5. Barker, N.K.S., Bayne, E.M., Cumming, S.G., Dénes, F., Fontaine, T., Haché, S., Houle, M., Knight, E., Leston, L., Mahon, C.L., Matsuoka, S.M., Schmiegelow, F.K.A., Sólymos, P., Song, S.J., Stehelin, T., Stralberg, D., Suárez-Esteban, A., Toms, J.D., Van Wilgenburg, S., and **Westwood, A.** 2017. Annual Report - April 2016-March 2017. Boreal Avian Modelling Project, Edmonton, AB, Canada. Available [here](#).
6. **Westwood, A.**, Reitsma L., and Lambert, D. 2017. Prioritizing Areas for Canada Warbler Conservation and Management in the Atlantic Northern Forest of Canada. High Branch Conservation Services. Hartland, VT. Available [here](#).
7. **Westwood, A.**, C. Harding, L. Reitsma, and D. Lambert. 2017. Guidelines for Managing Canada Warbler Habitat in the Atlantic Northern Forest of Canada. High Branch Conservation Services. Hartland, VT. Available [here](#).
8. **Westwood, A.**, Jacob, A., + 23 coauthors. 2017. Strong foundations: Recap and recommendations from scientists regarding the federal environmental and regulatory reviews. Available [here](#).
9. Smith, T., Gibbs, K., **Westwood, A.**, Taylor, S., Walsh, K. 2017. Oversight at risk: The state of government science in British Columbia. Evidence for Democracy. Available [here](#).
10. Taylor, S., **Westwood, A.** 2017. Scientific integrity for environmental decision-making: A submission to Canada's Expert Panel for reform of the Canadian Environmental Assessment Act. Evidence for Democracy. Available [here](#).
11. Barker, N.K.S., Bayne, E.M., Cumming, S.G., Fontaine, T., Haché, Leston, L., Mahon, C.L., Matsuoka, S.M., Schmiegelow, F.K.A., Sólymos, P., Song, S.J., Stehelin, T., Stralberg, D., Suárez-Esteban, A., Toms, J.D., Van Wilgenburg, S., and **Westwood, A.** 2016. Annual Report - April 2015-March 2016. Boreal Avian Modelling Project, Edmonton, AB, Canada. Available [here](#).
12. **Westwood, A.** 2016. Response to Canada's Terms of Reference for National Energy Board Modernization expert panel. Evidence for Democracy. Available [here](#).
13. **Westwood, A.** 2016. Response to Canada's Terms of Reference for Canadian Environmental Assessment Act expert panel. Available [here](#).
14. **Westwood, A.** 2016. Response to Canada's proposals for revitalizing access to information. Evidence for Democracy. Available [here](#).
15. **Westwood, A.** 2016. Moving from open data to open science - A response to Canada's Open Government Draft Plan. Evidence for Democracy. Available [here](#).
16. Peltier, W.R., Stone, J., Takaro, T., **Westwood, A.** 2015. On the role of Canada's scientists in transitioning to a low-carbon future. In *Acting On Climate Change: Extending the Dialogue Among Canadians*. Sustainable Canada Dialogues. Available [here](#).
17. **Westwood, A.**, Sólymos, P., Fontaine, T., Bayne, E. 2015. Estimating population density of the Rusty Blackbird (*Euphagus carolinus*), Olive-Sided Flycatcher (*Contopus cooperi*), and Canada Warbler (*Cardellina canadensis*) in national parks in New Brunswick and Nova Scotia. Boreal Avian Modeling Project, University of Alberta, and Dalhousie University. Prepared for Parks Canada.
18. **Westwood, A.** 2012. Habitat Suitability Index (HSI) Models In Kejimikujik and Fundy National Parks: Canada Warbler, Olive-Sided Flycatcher, Rusty Blackbird, and Eastern Wood-Pewee. Dalhousie University. Report prepared for Parks Canada.
19. Bigland-Pritchard, M., Rooney, K., **Westwood, A.** 2012. Commitment Issues: Tar sands extraction invalidates Canada's obligations to the UNFCCC and undermines global climate change negotiations. Canadian Youth Delegation & Low Energy Design Ltd.

LECTURES AND CONFERENCE CONTRIBUTIONS

Invited presentations and workshops

1. **Westwood, A.** 2017. A once-in-a-generation opportunity: Science and the reform of Canada's environment-related laws. Invited speaker, Biodiversity Discussion Group, University of British Columbia, 11/23 Vancouver, Canada (institutional).
2. **Westwood, A.** 2017. A once-in-a-generation opportunity: Science and the reform of Canada's environment-related laws. Invited speaker, Department of Biology, Simon Fraser University, 11/29 Burnaby, Canada (institutional).
3. **Westwood, A.** 2016. Standing up for science: A crash course in science advocacy. Workshop at Biological Sciences, University of Winnipeg, 3/22 Winnipeg, Canada (institutional).
4. **Westwood, A.** 2016. Standing up for science: A crash course in science advocacy. Workshop at Ecology @UVic Seminar, University of Victoria, 9/28 Victoria, Canada (institutional).
5. **Westwood, A.** 2016. Standing up for science: A crash course in science advocacy. Workshop at Cell and Physiological Sciences Graduate Society Seminar, University of British Columbia, 10/27 Vancouver, Canada (institutional).
6. **Westwood, A.** 2013. Federal cuts to scientific funding: consequences for the researchers of tomorrow. Invited speaker at Stand Up For Science gathering (other speakers including Elizabeth May, Megan Leslie, and Dr. Thomas Duck), 9/16 Halifax, Canada (regional).
7. **Westwood, A.** 2013. Standing up for science: A crash course in science advocacy. Invited speaker at Ruminations Speaker Series, Dalhousie Agricultural College, 11/12 Truro, Canada (institutional).
8. **Westwood, A.** 2013. Standing up for science: A crash course in science advocacy. Workshop at Department of Environmental Studies, University of Winnipeg (institutional), 5/21 Winnipeg, Canada.
9. **Westwood, A.** 2013. Standing up for science: A crash course in science advocacy. Workshop at Parkland Institute, University of Alberta, 5/7 Edmonton, Canada (institutional).
10. **Westwood, A.** 2012. Bog sweet bog: Habitat associations of bird species at risk in Nova Scotia's treed wetlands. Invited speaker at Mersey-Tobeatic Research Institute Speaker Series, 7/12 Kempt, Canada (regional).
11. **Westwood, A.** 2010. Ecosystems under threat in Manitoba: Determining obligations to our forests. Invited speaker at University of Winnipeg Philosophy Students' Association Speaker Series, 12/1 Winnipeg, Canada (institutional).

Refereed academic conference contributions (Presenter(s) indicated by *. Oral presentation unless stated otherwise)

12. Westwood, R.*, **Westwood A.**, Hooshmandi, M., Pearson, K., LaFrance, K., and Murray, C. 2018. Powesheik Skipperling species distribution modelling project: Summary 2016-2018. International Powesheik Workshop, 2/14 Detroit, USA (international).

13. Dénes, F., Barker, N., Cro, Psby, A., Haché, S., Solymos, P., Stralberg, D., **Westwood, A.**, St-Laurent, K., Bayne, E., Cumming, S., Song, S., Schmiegelow, F. 2018. Identification of critical habitat for wide-ranging migratory birds: a conceptual model toward achieving self-sustaining populations. North American Congress for Conservation Biology 7/21-26, Toronto, Canada (international).
14. **Westwood, A.**, Lambert, D., Reitsma, L.* 2017. Bridging the research-management divide: A collaborative spatial approach for species-at-risk conservation using the Canada Warbler. Poster at AOS-SCO Meeting 7/31-8/5 East Lansing, USA (national).
15. Harper, K.*, Staicer, C., Gray, L, **Westwood, A.** 2017. Biodiversity and ecosystem functioning of forested wetlands across Atlantic Canada. Poster at Atlantic Canada Peatlands and Wetlands Symposium, 6/6-7 Shippigan, Canada (regional).
16. Stacier, C.*, **Westwood, A.**, Ferarri, C., and Crosby, B. 2016. [Breeding habitat and vocal behavior of Rusty Blackbirds in Nova Scotia](#). International Rusty Blackbird Working Group Workshop, North American Ornithological Congress, 8/16-20 Washington, USA (international).
17. **Westwood, A.***, Solymos, P., Fontaine, T., Mazerolle, D., Bayne, E., and Staicer, C. 2016. [Predicting population size and density of species at risk in national park](#). Poster at CAG-ACG Annual Meeting 2016), 5/30-6/4 Halifax, Canada (regional).
18. Bale, S.*, Beazley, K., Bush, P., **Westwood, A.**, Ferrari, C. 2015. Maximizing the utility of Maxent: Exploring the influence of selection modality, feature types, and bias mask in model building. Poster at International Congress of Conservation Biology, 8/2-6 Montpellier, France (international).
19. Bale, S.*, Beazley, K., Bush, P., **Westwood, A.**, Ferrari, C. 2015. Applying principles of ecological resilience theory to model bird habitat in a context of climate change. Poster at International Symposium on Digital Earth, 10/ 5-9 Halifax, Canada (international).
20. **Westwood, A.***, Solymos, P., Fontaine, T., and Bayne, E. 2015. Species distribution modeling for three landbird species at risk: The contribution of protected areas to habitat and the effects of scale on population estimates. WOS/AFO/SCO-SOC 2015 Joint Meeting, 7/16-18 Wolfville, Canada (international).
21. Haché, S.*, **Westwood, A.*** 2015. Boreal Avian Modelling Project: Advances and applications from national to local initiatives. Canada Warbler International Conservation Initiative Breeding Grounds Summit, 3/10-12, Ottawa, Canada (international).
22. Ferrari, C.*, **Westwood, A.**, Randall, J., Darlington-Moore, S., Kindree, M., Staicer, C. 2014. Species distribution models for six species of landbirds at risk in southwestern Nova Scotia. Mersey-Tobeatic Research Institute 3rd Annual Science Meeting, 11/7 Lunenburg, Canada (regional).
23. **Westwood, A.***, Staicer, C. 2014. Habitat associations of the Rusty Blackbird in Nova Scotia, and opportunities for conservation within a multi-species suite. AOU/COS/SCO Joint Meeting, 9/23-28 Estes Park, USA (international).
24. **Westwood, A.***, Randall, J., Achenbach, L., Lavallee, A., Pray-Leslie, A., Cormier, D., Staicer, C. 2014. Field surveys for three landbird species at risk and their wet forest habitat in southwestern Nova Scotia. Poster at the Elizabeth May Sustainability and Environmental Research Symposium, 5/7 Halifax, Canada (institutional).

25. **Westwood, A.***, Randall, J., Achenbach, L., Lavallee, A., Pray-Leslie, A., Cormier, D., Staicer, C. 2013. Field surveys for three landbird species at risk and their wet forest habitat in southwestern Nova Scotia. Poster at the Mersey-Tobeatic Research Institute Science Conference, 11/1 Bridgewater, Canada (regional).
26. **Westwood, A.***, Staicer, C. 2013. A preliminary assessment of Rusty Blackbird, Olive-Sided Flycatcher, and Canada Warbler habitat in the Southwest Nova Biosphere Reserve. Society of Canadian Ornithologists Meeting, 8/12-14 Winnipeg, Canada (national).
27. **Westwood, A.***, Staicer, C. 2012. A comparison of Rusty Blackbird habitat on managed and protected lands in the Southwest Nova Biosphere Reserve. Mersey-Tobeatic Research Institute Conference, 11/1-2, Caledonia, Canada (regional).
28. **Westwood, A.***, Staicer, C. 2012. A comparison of Rusty Blackbird habitat on managed and protected lands in the Southwest Nova Biosphere Reserve. International Rusty Blackbird Working Group Meeting, hosted at the Northeast Bird Conservation Conference, 10/16-18, Plymouth, USA (international).
29. **Westwood, A.***, Staicer, C., Bush, P. 2012. Preliminary habitat suitability models for three forest-dwelling bird species at risk in the Southwest Nova Biosphere Reserve. Poster presented at Geomatics Atlantic, 6/12-14 Halifax, Canada (regional).
30. **Westwood, A.***, Staicer, C. 2012. A preliminary habitat suitability (HSI) model for the Rusty Blackbird (*Euphagus carolinus*) in Kejimikujik National Park Sustainability and Environmental Research Symposium, 3/9 Halifax, Canada (regional).
31. **Westwood, A.**, Conciatori, F., Tardif, J.*, Knowles, K. 2011. Effects of *Armillaria* root rot disease on the growth of *Picea mariana* in the boreal plains of central Canada. Poster presented at Eurodendro 2011, 9/19-23 Engelberg, Switzerland (international).
32. **Westwood, A.***, Conciatori, F., Tardif, J., Knowles, K. 2011. Effects of *Armillaria* root rot disease on the growth of *Picea mariana* in the boreal plains of central Canada. Poster presented at Deadwood 2011: International symposium on dynamics and ecological services of deadwood in forest ecosystems, 5/15-19 Rouyn-Nouranda, Canada (international).
33. **Westwood, A.*** 2010. The effects of *Armillaria* root disease on the growth of black spruce (*Picea mariana*) in western Manitoba. Prairie Universities Biological Symposium, 2/18-20 Brandon, Canada (regional).

PUBLIC CONTRIBUTIONS

Articles

- 2018 Policy Options
- 2017 The Scientist • Le Devoir
- 2016 Bird Watcher's Digest (cover article) • The Toronto Star
- 2015 Humanist Perspectives (cover article) • The Toronto Star • The Hill Times • The Chronicle Herald • LoveNature • Picoides
- 2014 The Toronto Star • Canadian Journalists for Free Expression • The Coast • Alternatives Journal
- 2013 Alternatives Journal
- 2012 Rabble • The Chronicle Herald • Alternatives Journal • Youth Policy

Guest lectures

- 2017** Halifax Plant Ladies Naturalist Society
Seacology by Kayak
ENVS3200 Introduction to Environmental Law, Dalhousie University
Samara Canada EPC-IRL Conference
First Year Interest Group Panel on Science Communication, Dalhousie University
- 2016** Evidence for Democracy's 3-part Network of Experts Comms for Scientists webinar series
Boreal Avian Modelling Project
Nature Conservancy of Canada
- 2015** Center for Inquiry Halifax
Environmental Programs Student Society, Dalhousie University
Boreal Avian Modelling Project/Environment Canada/Parks Canada
- 2014** New Brunswick Eastern Habitat Joint Venture/Department of Natural Resources
Nova Scotia Community College
- 2012** Conference of Parties to the UNFCCC 18 International Forum on Globalization
International Conference of Youth 8
Powershift 2012

Press

Covered by dozens of regional, national, and international TV, radio, and print news outlets, with frequent interviews. Featured in the CBC TV documentary Birds at Risk.

RESEARCH GRANTS AND CONTRACTS

Peer-reviewed, competitive external grants

Investigators	Title	Funding Source	Year(s)	Total Amount
Westwood, A. (co-PI) and Walsh, K (co-PI). on behalf of Evidence for Democracy	Provincial science integrity in British Columbia	West Coast Environmental Law	2016	\$2 500
Staicer, C. (PI), and Westwood, A (collaborator).	Conserving landbird species at risk in the Atlantic Coastal Plain of NS	Nova Scotia Habitat Stewardship Program	2012-2014	\$10 000

Internal grants and other non-competitive funding

Investigators	Title	Funding Source	Year(s)	Total Amount
Westwood, A. (co-PI) and Walsh, K. (co-PI), on behalf of Evidence for Democracy	Provincial science integrity in British Columbia	Professional Employees Association of B.C.	2016	\$25 000
Bayne, E. (PI), and Westwood, A. (collaborator)	Species distribution models of the Rusty Blackbird (<i>Euphagus carolinus</i>), Olive-Sided Flycatcher (<i>Contopus cooperi</i>), and Canada Warbler (<i>Cardellina canadensis</i>) at the national and regional (Maritime) level, and an assessment of habitat availability in Maritime National Parks	Parks Canada	2014	\$7 500
Westwood, A. (PI)	Habitat suitability index (HSI) models for the Rusty Blackbird (<i>Euphagus carolinus</i>), Olive-Sided Flycatcher (<i>Contopus cooperi</i>), and Canada Warbler (<i>Cardellina canadensis</i>) in Kejimikujik NP	Parks Canada	2012	\$5 000

Contracts/consultancies

Contract Awarded To	Title	Funding Source	Competitive	Year(s)	Total Amount
Westwood, A., and Pearson, K.	Species distribution model for the Powesheik Skipperling in Manitoba	University of Winnipeg	No	2017	\$7 500
Westwood, A.	Habitat management guidelines and spatial mapping for the Canada Warbler in BCR14	High Branch Conservation Services Ltd.	No	2015	\$10 000 (USD)
Westwood, A., and Stehelin, T.	COSEWIC status report for the Olive-sided Flycatcher (<i>Contopus cooperi</i>)	Environment Canada – Canadian Wildlife Service	Yes	2015	\$6 800

AWARDS AND PRIZES

- 2017 Samara Canada Everyday Political Citizen IRL Conference Travel Award (up to \$1000)
- 2016 SpringTide Co-Resolve Deep Democracy Training Attendance Scholarship (\$350)
Nominee for Samara Canada's Everyday Political Citizen award
- 2015 ESRI Canada Student Award (\$1500)
- 2014 Elizabeth May Sustainability and Environmental Research Symposium, best graduate research poster (\$150)
President's Graduate Teaching Assistant Award (\$500)
Dalhousie Office of Sustainability Brightest Idea Competition (with Takafumi Osawa, \$150)
Sisam Forestry Award (\$1000)
Society of Canadian Ornithologists, Travel Award (\$490)
- 2013 Society of Canadian Ornithologists Annual Meeting, 2nd in student presentation competition
- 2012 Mersey-Tobeatic Research Institute Annual Science Conference, travel award (\$100)
Northeastern Bird Conservation Conference Planning Committee, travel award (\$250)
Elizabeth May Sustainability and Environmental Research Symposium, 1st in graduate research poster (\$500)
- 2011 American Ornithologists Union, student membership award
- 2010 University of Winnipeg, Gold Medal for Excellence (student-designed major)
- 2008 Datatel, Scholars Award (\$1 500)

SCHOLARSHIPS AND FELLOWSHIPS

- 2018 MITACS Canadian Science Policy Fellowship postdoctoral award (\$77 000)
National Science and Engineering Research Council (NSERC) Postdoctoral Scholarship (\$90 000/2y, declined)
- 2012 NSERC Postgraduate Scholarship (PGS-D, 3 years, \$66 000/3y), Dalhousie University, President's Award (\$15 000/3y)
- 2011 NSERC, Alexander Graham Bell Canada Graduate Scholarship (CGS-M, \$14 500)
- 2010 NSERC, Undergraduate Student Research Award (\$4 500)
Catherine Sosiak Memorial Scholarship (\$300, declined)
Academic Proficiency Scholarship (\$750)
- 2009 NSERC, Undergraduate Student Research Award (\$4 500)
Manitoba Round Table for Sustainable Development, undergraduate scholarship (\$2 500)
University of Winnipeg, Academic Proficiency Scholarship (\$750)
- 2006 University of Winnipeg, Academic Proficiency Scholarship (\$1500/2y)
Alumni Entrance Scholarship (\$5 000)
Alfred Longman Entrance Scholarship (\$500)

TEACHING EXPERIENCE

University of Winnipeg

- 2018 BIOL4451 Forest Ecosystems Field Course, *Instructor*

Dalhousie University

- 2014-2017 BIOL2601 Flora of Nova Scotia, *Instructor*
- 2012-2014 Writing Centre Tutor
- 2011-2013 BIOL3633 Spatial Information and GIS in Ecology, *Teaching Assistant*
- 2011-2013 PHIL2050 Ethics in Science, *Teaching Assistant*
- 2011-2013 SCIE1515 Integrated Science Writing, *Teaching Assistant*

University of Winnipeg

- 2010 ENV2603 Environmental Sustainability, *Teaching Assistant*
- 2010 ENV1600 Human-Environmental Interactions, *Marker*
- 2008-2010 BIOL2301 Biology of Vascular Plants, *Lab Demonstrator/Marker*
- 2008-2009 GEOG2213 Introductory Soil Science, *Lab Demonstrator/Marker*
- 2008-2009 GEOG1201 Introductory Atmospheric Science, *Lab Demonstrator/Marker*
- 2007-2009 BIOL1115 Cells and Cellular Processes, *Lab Demonstrator/Marker*
- 2007-2009 BIOL1116 Evolution, Ecology, and Biodiversity, *Lab Demonstrator/Marker*

STUDENT SUPERVISION

Undergraduate Special Topics Courses/Independent Study

- 2015 Thompson, Hilary. ENVS3801 Directed Readings, Dalhousie University
- 2014 Johnson, Courtney (co-supervised by Dr. Cindy Staicer). BIOL/MARI4806 Special Topics, Dalhousie University
- 2014 Vietinghoff, Christina (co-supervised by Dr. Roger Jacobs). ARTSCI3X03 Directed Readings, McMaster University

Undergraduate Community Service Learning Placement

- 2017 Arielle Dufresne, Stefanie El-Beyrouti, and Leah Afework. University of Ottawa
- 2016 Alexander Satenstein and Sofiya Kominksi. University of Ottawa
- 2015 Taylor Ducharme, Elias Rizek, Matthew Bunn, Kelly Lepchuk, Sasha Masabanda, Dexter Tang, and Andréanne Roy. University of Ottawa

EMPLOYMENT HISTORY

- 2018-current **Environmental Assessment Officer**, Natural Resources Canada, Ottawa, ON. Produced policy briefs, memos, and syntheses for decision-makers on topics related to environmental assessment, Indigenous knowledge, cumulative effects, and scientific integrity. Co-developed policy framework for implement new environmental assessment legislation in the department.
- 2017-2018 **Science & Policy Analyst**, Yellowstone to Yukon Conservation Initiative, Canmore, AB. Coordinated leading scientific experts to respond to proposed changes to environmental assessment and species at risk laws. Produced reports, peer-reviewed papers, and communications products, including media briefings and direct meetings with high-level public servants and political party staffers.

- 2014-2017 **Research Coordinator**, Evidence for Democracy, Ottawa, ON. Led national research program and projects, supervised students and interns, coordinated a 400+ member network of experts, developed and released policy briefings, provided communications and advocacy training for scientists.
- 2014-2017 **Contributing Scientist**, Boreal Avian Modelling (BAM) Project, Edmonton, AB. Developed species distribution models and wildlife management products for clients including Parks Canada, COSEWIC, the University of Winnipeg, and others.
- 2011-2012 **Research Assistant**, Joro Environmental Consultants Ltd., Winnipeg, MB. Conducted fieldwork and literature review, as well as report writing, for large-scale environmental impact assessments.
- 2005-2010 **Field Research Technician**, University of Winnipeg, Winnipeg, MB. Planned and supervised field research projects in diverse disciplines including dendrochronology, soil science, forest health, entomology, botany, and GIS.

PROFESSIONAL SERVICE AND VOLUNTEER WORK

Professional Reviewing and Advisory Responsibilities

- Biological Conservation (2)
Canadian Journal of Forest Research (1)
Forest Ecology & Management (1)
Urban Forestry & Urban Greening (1)

Professional Association Affiliations and Service

- 2017-present Policy and Outreach Consultant, Boreal Avian Modelling Project
2015-present Member, Canadian Society of Ornithologists
2013-2016 Member, Canada Warbler International Conservation Initiative
2011-2016 Member, International Rusty Blackbird Working Group

Faculty & Departmental Service

- 2018-present Member, Advocacy Committee, NRCan Pride Network
2012-2013 Treasurer, Biology Association of Graduate Students, Dalhousie University
2012-2013 Graduate Student Representative, Hillel Atlantic

Community and Non-governmental Service

- 2019-present Voting member, Environmental Stewardship Committee, City of Ottawa
2017 Volunteer, Shift Imprints
2013-2014 Atlantic Representative, Volunteer Coordinator, and Communications Committee Member, Evidence for Democracy (E4D)
2011-2014 Co-founder, Research Director, and Volunteer Coordinator, The Food Label Movement (FLM),
2012 Selected Canadian Youth Delegation member to UNFCCC Conference of Parties 18, Doha, Qatar, Canadian Youth Climate Coalition (CYCC), Regional Coordinator, PowerShift 2012 conference

- 2007-2008** Representative and volunteer, SUNSET (Sustainable University Now, Sustainable Earth Together)
Coach, varsity badminton (University of Winnipeg Collegiate) and junior high basketball (Dakota Community Centre, Linden Meadows School)
- 2003-2006** Prime Minister, University of Winnipeg Collegiate student council (2006)
Co-founder and organizer, University of Winnipeg Collegiate social justice committee/recycling program

CERTIFICATIONS

- 2018** TREC Management Skills Training
2017 CPR C and Standard First Aid
2009 Canoe Tripping Level 1
2007 Bronze Cross Re-Certification • Wilderness First Aid/CPR
2006 Flatwater C Canoeing

OTHER SKILLS

- Languages** English/French functionally bilingual, Cantonese beginner, Hebrew beginner
- Writing** Published fiction and creative non-fiction in a number of magazines and anthologies
- Athletics** Former 4-time Manitoba champion (badminton), Canada Games Badminton Team co-captain, 4-time national quarterfinalist in doubles (badminton), Member of Manitoba Collegiate Athletic Association league-winning team University of Winnipeg College Wesmen (basketball), Manitoba A/AA/AAA All-Star (basketball)
- Adventure** Former leader of 5-15 canoe trips for children aged 10-16 in remote areas, hiked the 1200 km Shikoku Henro pilgrimage in Japan, long-distance backpacker, canoe tripper, rock climber, and eco-endurance race runner